

The jobs we'll lose to machines — and the ones we won't by Anthony Goldbloom

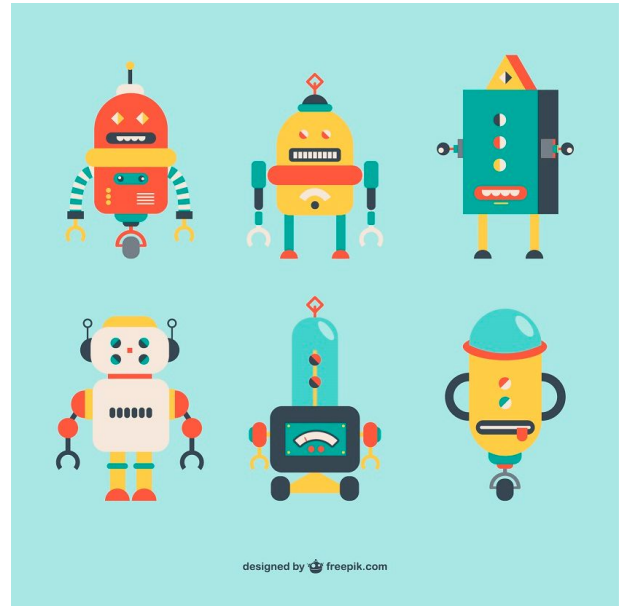
WARM-UP:

1. What kind of professions will disappear in the next 10-15 years and which ones will become more common?

Fill in the table with a partner:

DYING PROFESSIONS	TOP FUTURE JOBS
bank tellers, bookkeepers, typists, cashiers, payroll clerks, secretaries, door-to-door salespeople, factory worker etc.	software engineers, database administrators, healthcare jobs (nurses, personal care aides), service technicians, information security analyst, etc.

Do you think that on balance more jobs will be created or lost because of technology?



TED TALK:

2. Watch the TED talk and answer these questions:

- a) What were the findings of the study carried out at Oxford University?
Almost one in every two jobs have a high risk of being automated by machines
- b) What does machine learning enable?
Learn from data and mimic some of the things that humans can do.
- c) What could machine learning do in the 1990s and what can it do now?
Assessing credit risk of loans, sorting the mail by reading handwritten characters from zip codes (the 1990s). Grade high-school essays; perform eye check-ups (now)
- d) What are the things that humans can do and machines can't?
Tackle novel situations
- e) How was the microwave oven invented?
A physicist working on radar during World War II, when he noticed the magnetron was melting his chocolate bar.
- f) What two examples of tasks that humans are better at did the speaker mention?
Preparing a copy for a marketing campaign and developing business strategy.

3. Watch the TED talk again and fill in the gaps below:

- a) Artificial intelligence allows machines to learn from data and MIMIC some of the things that humans can do.
- b) The speakers company, Kaggle, operates on the CUTTING EDGE of machine learning.

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- c) People have made dramatic **BREAKTHROUGHS** in terms of machine learning over the past few years.
- d) Machines are going to **OUTPERFORM** humans at tasks like grading essays or doing eye check-ups.
- e) The invention of microwave oven is a particularly **REMARKABLE** example of creativity.
- f) A marketing copy has to **STAND OUT** from the crowd.
- g) Humans are better at tasks that involve **TACKLING** novel situations.

VOCABULARY:

4. Fill in the sentences with the words from exercise 3:

- a) Some say that one day we will all be replaced by computers with the ability to **MIMIC** human intelligence.
- b) As the data indicate, the experimental group **OUTPERFORMED** the control group in terms of their work efficiency
- c) We must make sure that we remain on the **CUTTING EDGE** of innovation and change otherwise our rivals will win.
- d) Globalisation would not have happened without the **BREAKTHROUGHS** achieved in the field of IT.
- e) One of the most **REMARKABLE** achievements of capitalism is the drop in infant mortality.
- f) The European Commission has outlined how this problem is being **TACKLED** at a European level.
- g) She was a great student, who **STOOD OUT** from the rest.

DISCUSSION:

5. In small groups, discuss the following points:

- Do you think that technology steals people's jobs?
- In what type of job might a human be happy to have a robot take over some tasks?
- Who might be affected positively and negatively by the addition of robots in the workforce?
- If robots take on some tasks currently performed by humans, how might the humans' jobs change?
- How can we change the education to prepare new generations for automation?

DEBATE:

6. You will be divided into two groups. One group will be in favour and the other against the following statement:

Robots are taking over humans' jobs.

In groups, prepare three/four arguments to support your opinion and think how to refute any potential counterarguments of your opponents.